REMARKS

Applicants have reviewed and considered the Office Action mailed on February 13, 2007, and the references cited therewith. Applicants respectfully request reconsideration and allowance of all claims in view of the following remarks.

Claims 1-7, 10-17, and 19-22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Bentz (U.S. Patent No. 7,057,623) in view of Iourcha et al (U.S. Patent No. 6,304,268). Claims 8-9, and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Bentz in view of Iourcha in further view of U.S. Patent No. 6,304,268 to Taylor et al. These rejections are respectfully traversed.

Claims 1-4 are cancelled. Claims 15 is amended to include the limitations of canceled claims 16 and 17. Independent claim 5 and amended independent claim 15 include limitations directed to a reduced portion of a normalized texture map coordinate, as described in paragraphs [0029-0033] and Figures 3B and 3C of the Applicant's original specification. The reduced portion of a normalized texture map coordinate is scaled by an LOD dimension to produce an unnormalized texture map coordinate. Importantly, the unnormalized texture map coordinate is a non-negative value that has a value between 0 and the LOD dimension - 1, as recited in claims 1 and 15. These parameters guarantee that the unnormalized texture map coordinate lies within the texture map.

The Examiner relies on Bentz for teaching of all of the limitations of claims 5 and 15, except for the LOD dimension. However, Applicant respectfully contends that Bentz does not teach or suggest the limitation of producing a reduced portion of a normalized texture map coordinate. In sharp contrast, Bentz teaches scaling the normalized texture map coordinates to produce unnormalized texture map coordinates. The unnormalized texture map coordinates are then modified to produce output coordinates that lie within the texture map. Specifically, the output coordinates are computed based on the sign of the unnormalized texture map coordinate, as described in col. 2, lines 27-34 of Bentz and in more detail in col. 5, line 51- col. 6, line 16 of Bentz. Importantly, the present application obtains a reduced portion of the normalized texture map coordinate before scaling by the LOD dimension to produce an unnormalized coordinate with a non-negative value that actually lies within the texture map. The claimed method, thus, does not rely on further modifications based on a sign, like Bentz, to produce a coordinate that lies within the texture map.

As previously described, Bentz does not teach or suggest producing a reduced portion of the normalized texture map coordinate. Iourcha and Taylor each fails to cure this deficiency.

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Neither Iourcha nor Taylor provides any specific teachings or insight into how texture coordinate values should be produced for non-power of two texture maps. In particular, none of these references teaches or suggests a texture map coordinate computation unit that is configured to receive a non-power of two LOD and compute unnormalized texture map coordinates for a non-power of two texture map using a portion of the normalized texture map coordinates, as recited in amended claim 15.
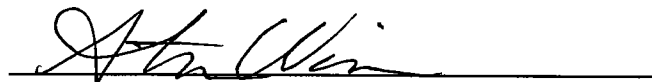
For these reasons, the combination of Bentz, Iourcha, and Taylor fails to teach or suggest each and every limitation of claim 1 and amended claim 15. Therefore, claims 5 and 15 are patentable over the combination of Bentz, Iourcha and Taylor. Since claims 6-14 and claims 18-22 depend from claims 5 and 15, respectively, these claims are also patentable over the combination of Bentz, Iourcha, and Taylor.

Conclusion

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed. Applicants reserve the right to subsequently take up prosecution of the claims as originally filed in this application in a continuation, a continuation-in-part and/or a divisional application. If the Examiner has any questions, please contact the Applicants' undersigned representative at the number provided below.

Respectfully submitted,

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